

CLAIMS

1. A glass composition to be used for manufacturing inorganic fiber, containing SiO₂ by 52 to 72 wt%, Al₂O₃ by less than 3wt%, MgO by 0 to 7wt%, CaO by 7.5 to 9.5wt%, B₂O₃ by 0 to 12wt, BaO by 0 to 4wt%, SrO by 0 to 3.5wt%, Na₂O by 10 to 20.5wt%, K₂O by 0.5 to 4.0wt% and P₂O₅ by 0 to 5wt%.
2. The glass composition according to claim 1, containing B₂O₃ by 0.1 to 12wt%.
3. The glass composition according to claim 2, containing BaO by 0.1 to 4.0wt% and SrO by 0.1 to 3.5wt%.
4. The glass composition according to claim 3, containing P₂O₅ by 0.1 to 5wt%.
5. The glass composition according to claim 1, containing B₂O₃ by 0.1 to 12wt%, and having KI value of 40 or more, said KI value being obtained by formula

$$KI = (Na_2O + K_2O + CaO + MgO + BaO + B_2O_3) - 2 \times Al_2O_3,$$

where the molecular formulas represents the respective contents expressed by wt%.

6. The glass composition according to claim 1, containing BaO by 0.1 to 4wt%, SrO by 0.1 to 3.5wt%, but not containing B₂O₃.
7. The glass composition according to one of claims 1-6, wherein raw material of the glass composition contains cathode ray tube glass and/or liquid crystal glass by 0 to 50wt%.
8. The glass composition according to one of claims 1-6, wherein raw material of the glass composition contains cathode ray tube glass and/or liquid crystal glass by 8 to 50wt%.
9. A method of manufacturing a molded product of inorganic fiber, comprising:

melting the glass composition according to one of claims 1-8 in a

melting furnace;

fining the molten glass composition into fine glass fiber in a fiberizing apparatus;

blowing an adhesive agent (binder) to the glass fiber to provide it with shape stability and load characteristics;

molding the glass fiber into the inorganic fiber molding having a predetermined density and a predetermined thickness by means of a fiber condenser and a dryer; and

subsequently cutting the molding to produce a finished product.

10. A molded product of inorganic fiber manufactured by the method according to claim 9.